

# **Technical Bulletin**

WHMIS Classification

Canadian DSL

# **MONOETHANOLAMINE**

**STRUCTURE** H<sub>2</sub>N-CH<sub>2</sub>CH<sub>2</sub>OH

**DESCRIPTION** A clear, water-white, hygroscopic liquid with a mild ammoniacal odor.

APPLICATIONS A chemical intermediate in the manufacture of cosmetics, surface-active agents,

emulsifiers, pharmaceuticals, and plasticizing agents; a gas-scrubbing agent for the absorption and removal of H<sub>2</sub>S and CO<sub>2</sub> from refinery and natural gas streams; carbon

dioxide and ammonia manufacturing.

## **SALES SPECIFICATIONS**

| <u>Property</u>       | <u>Specifications</u>                            | Test Method* |
|-----------------------|--|--------------|
| Appearance            | Clear and substantially free of suspended matter | ST-30.1      |
| Color, Pt-Co          | 15 max.  | ST-30.12     |
| Diethanolamine, wt%   | 0.1 max.   | ST-35.183    |
| Monoethanolamine, wt% | 99.5 min.  | ST-35.183    |
| Water, wt%            | 0.3 max.   | ST-31.53, 6  |

\*Methods of Test are available from Huntsman Corporation upon request.

## **ADDITIONAL INFORMATION**

| Chemical Properties     |                 | Typical Values                     |         |
|-------------------------|-----------------|------------------------------------|---------|
| Molecular Weight        | 61.08           | Boiling Point, 760 mm Hg, °F/°C    | 339/171 |
| рН                      | 11.8            | Flash Point, PMCC, °F/°C           | 204/96  |
|                         |                 | Melting Point, °F/°C               | 51/11   |
| Regulatory Information  |                 | Specific Gravity, 20/20°C          | 1.0179  |
| DOT/TDG Classificati    | on Ethanolamine | Vapor Pressure, mm Hg, 20°C (68°F) | <1      |
| Hazard Class 8, UN 2491 |                 | Weight, lb/gal, 20°C (68°F)        | 8.47    |
| Packing Group III       |                 |                                    |         |
|                         | Corrosive       |                                    |         |
| HMIS Code               | 3-1-0           |                                    |         |
| CAS Number              | 141-43-5        |                                    |         |
| TSCA Inventory          | Yes             |                                    |         |

E, D2B

Yes



#### **TOXICITY AND SAFETY**

For information on the toxicity and safe handling of this product, please read the Material Safety Data Sheet prior to use of the product.

#### HANDLING AND STORAGE

Monoethanolamine may be satisfactorily stored in carbon steel, stainless steel, or aluminum tanks using steel pipes and pumps. Caution must be exercised, however, to keep the material in the anhydrous state to prevent severe corrosion to the carbon steel or aluminum tank and related equipment. A drier on the breathing nozzle is recommended to help maintain anhydrous conditions in the storage tank.

For longer term color stability, it is recommended that the product be stored under an inert atmosphere. Solid sediment may form upon standing. There should be circulation in the storage vessel to keep solids suspended.

Low pressure steam coils in storage tanks and heat tracing of transfer lines should be provided in cases where low environmental temperatures may make pumping of the product difficult.

#### SHIPPING DATA

Product is available in tank cars, tank wagons and drums. Small samples are available by contacting our sample department at 1-800-662-0924.

### BIODEGRADABILITY AND ENVIRONMENTAL SAFETY

Monoethanolamine undergoes moderate biodegradation and is not expected to be persistent in the environment.

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**Huntsman Advanced Technology** Center **Technical Service** 8600 Gosling Rd. The Woodlands, TX 77381 (281) 719-7780

Samples 1-800-662-0924

1086-0511

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